JAGANNATH INTERNATIONAL MANAGEMENT SCHOOL

DEPARTMENT OF MEDIA & COMMUNICATION STUDIES

2021-2024

jims
Vasant Kunj, New Delhi

Video Production Lab

Lab Manual

COURSE CODE : 253

Name:_____

Enrollment No._____

Class:_____

About this Manual

OBJECTIVE OF THIS MANUAL

This Lab Manual is intended to be used by BJMC, Semester III students for the Video Production l

The Video Production Lab Manual covers topics that are essential for the students to strengthen the theoretical concepts. The purpose of this manual is to give guidance and instructions to the student regarding the subject.

- Build capacity of the students to do their assignments professionally
- To have uniformity in assignment presentation
- To be of reference for the students
- Continuous assessment of the students

HOW TO USE THIS MANUAL

Use of this Lab Manual is mandatory for the completion of the practicals. It provides the students with first-hand knowledge of the practical subjects. It also makes them learn a systematic approach to do their task proficiently as per the need and requirement of the industry.

INSTRUCTIONS TO STUDENTS

1. Students are REQUIRED to carry this manual during the Lab Class.
2. Students are REQUIRED to read the topics mentioned before coming to the Lab Class.
3. Sudents are REQUIRED to follow the timeline for each assignment.

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VIDEO CAMERA

VIDEO CAMERA

An electronic device that captures and records motion pictures one frame at a time. Each frame is captured as a series of horizontal lines, the number of which determines the fundamental visual quality of the images.

The electronic or VIDEO CAMERA is similar to any other camera in that light reflected from an image is focused by a lens onto a plane inside the camera.

A professional video camera is a high-end device for creating electronic moving images (as opposed to a movie camera,which records the images on film). Originally developed for use in television studios, they are now commonly used for corporate and educational videos, music videos, and direct-to-video movies.

There are two types of professional video cameras:
High end portable, recording cameras (essentially, high-end camcorders) used for ENG and EFP image acquisition, and Studio cameras which lack the recording capability of a camcorder, and are often fixed on studio pedestals.

Portable professional cameras are generally much larger than consumer cameras and are designed to be carried on the shoulder.

VIDEO CAMERA

VIDEO CAMERA

Sony DSR-PD170 DVCAM Camcorder

Upgrading its popular DSR-PD150, Sony's latest DV camcorder, the DSR-PD170, is a serious consideration for people eyeing the Canon XL1s, the XL2 or the Panasonic AG-DVX100. The PD170 comes packed with pro features, such as built-in XLR connectors and easy access to manual controls. While it doesn't have trendy features like 24p or proper 16:9 widescreen, the improved video quality alone puts it among the best in the Mini DV category. This camcorder may become the new favorite for documentary producers, wedding videographers, industrial shooters and journalists. This is one of the best DV camcorders that makes full manual control fairly easy.

Use Both Hands

The PD170 is a relatively small-but-solid brick of a camera, especially when compared to the Canon competition. The handgrip is behind the center of gravity, making the camera a bit front-heavy, especially if you use the included wide-angle adapter. Most common functions such as audio levels, white balance, shutter, iris and gain are assigned dedicated buttons on the camera body, preventing them from becoming lost on a menu. All are easily accessible and logically designed.

VIDEO CAMERA

VIDEO CAMERA

The included remote control allows operation of all standard features without touching the camera. The camera shoots both DV and DVCAM, but the data is the same for both, so there is no image quality difference between the two.

Optics

The 12x zoom uses a standard rocker switch on both the tape transport and handle top, but a dedicated zoom ring just behind the focus on the lens barrel is easy to grab. Control over variable speeds is excellent with a very comfortable amount of drag on the zoom ring. With a little practice, you'll find how smooth and easy manual zooming can be. The zoom can also be set to run at constant rates.

The PD170 focuses quickly and precisely in either auto or manual modes, and the knurled rubber focus ring provides a proper amount of drag. The autofocus is fast and reliable and does a better job than most at nailing your subject, even in low-light and low- contrast situations. Sony maintains a high degree of image quality with purely optical image stabilization.

Audio XLR connectors are no longer an option: there just aren't many (any?) decent microphones out there that don't have XLR connectors. For videographers, that means that either your camera must have XLR connections or you'll need an adapter. The two-channel XLR breakout box on the PD170 allows the user to select microphone/line levels, 48-volt phantom power and

VIDEO CAMERA

does some simple channel mixing and attenuation, but there are no level controls. The housing for the included shotgun microphone is well placed, but running cords to two off-camera microphones may require some wrangling to keep them out of the operator's (and the lens') way. Sound quality from the on-camera microphone is excellent, with little noise from the transport and zoom motors of the camera. Quality is even better when using the microphone off camera and close to the subject. Auto Gain Control is fast and usually accurate, but manual control is, of course, possible. Meters on the LCD make monitoring simple, but setting levels always requires a button press and then a turn of the dial, which is not the most convenient operation. Further, since there is only a single dial, if you want to set the level for each channel individually, you need to include yet another dial press to switch between the channels. This is not a design flaw and, indeed, we can't think of a better way to implement gain control on such a small camcorder. This is also another example of the point-and-shoot style of videography this camera encourages.

Superb Image Quality

Image quality is superb. The PD170 has squeezed about as much dynamic range and color out the DV format as is possible. In high contrast mid-day sun, one of the most challenging shooting situations, shadows still retain some detail while the highlights aren't overly blown out. Colors are fully saturated and accurately rendered. There is no noticeable sensitivity to one or more

VIDEO CAMERA

colors providing a true color response. Even in very (very) low-light situations, colors and contrast remain rich and accurate providing an excellent dynamic range with very little noise, even when employing gain (up to +18dB).

The auto white capability is very good, but it can be fooled in multiple light temperature environments. Sony has made it so easy to white balance manually that it would be a shame not to take advantage of this. Exposure control is also under both auto and manual control. Iris and shutter have independent control via dedicated wheels. Auto Exposure Shift allows the user to change the shutter or iris, while simultaneously letting the camera select the appropriate gain for correct exposure.

Run and Gun

The PD170 is a professional-grade Mini DV camcorder. Controlled by a knowledgeable user, it can create images and audio near the top range of the format's capabilities. If you are shopping for a camera in this class, there are only a few to consider. For example, the PD170 is much smaller, more portable and less expensive than the Canon XL2. It does not, however, have the endless imaging tweaks and subtle adjustments that are available with the new XL2 or the Panasonic DVX100. The PD170 does have all of the basic manual controls a professional needs to create outstanding images and sound, but it also has superior automatic features.

VIDEO CAMERA

VIDEO CAMERA

This makes it an ideal run-and-gun shooter, which is why you see it in the field with journalists and documentary shooters so often.

Brian Peterson is a Communications Director with the American Lung Association and has more than 14 years of broadcast video production experience.

TECH SPECS

Format: Mini DV and DVCAM

Lens: F/1.6-2.4; fl=6 mm to 72 mm; 12x optical zoom; 58mm filter diameter

Image sensor: 3 x 1/3-inch CCD

Gross pixels (per CCD): 380K

Video pixels (per CCD): 340K

Viewfinder: color (180K pixels)

LCD viewscreen: 2.5-inch color (211K pixels)

Focus: auto, manual

Anamorphic 16:9: no

Image Stabilization: optical

Exposure: auto, manual, presets (5)

Minimum Shutter Speed: 1/4

Maximum Shutter Speed: 1/10,000

Iris: auto, manual

Electronic Gain: +18dB

Frame Rate: 60i

Neutral Density Filter: yes (2)

Zebra Stripes: yes (70%, 100%)

White Balance: auto, manual, presets

Audio: 12-bit (default), 16-bit

Audio Gain: auto, manual

Microphone Input: XLR (x 2), 48V DC phantom power

Headphone Output: 1/8-inch stereo mini

Inputs: FireWire, S-video, composite

Outputs: FireWire, S-video, composite

Edit Interface: FireWire

Additional: wide-angle adapter (0.7x)

Dimensions (w x h x d): 4.9 x 7.1 x 15.9 inches (125 x 180 x 405 mm)

Weight (sans tape and battery): 3.3 lbs. (1.5 kg)

Performance

Horizontal Resolution: 520+ lines

Field of View (4:3): 39 degrees

VIDEO CAMERA

VIDEO CAMERA

Field of View (w/ included adapter): 54 degrees

STRENGTHS

- Professional controls
- Outstanding imaging
- Relatively small size

WEAKNESSES

- No anamorphic 16:9 mode
- Limited imaging flexibility

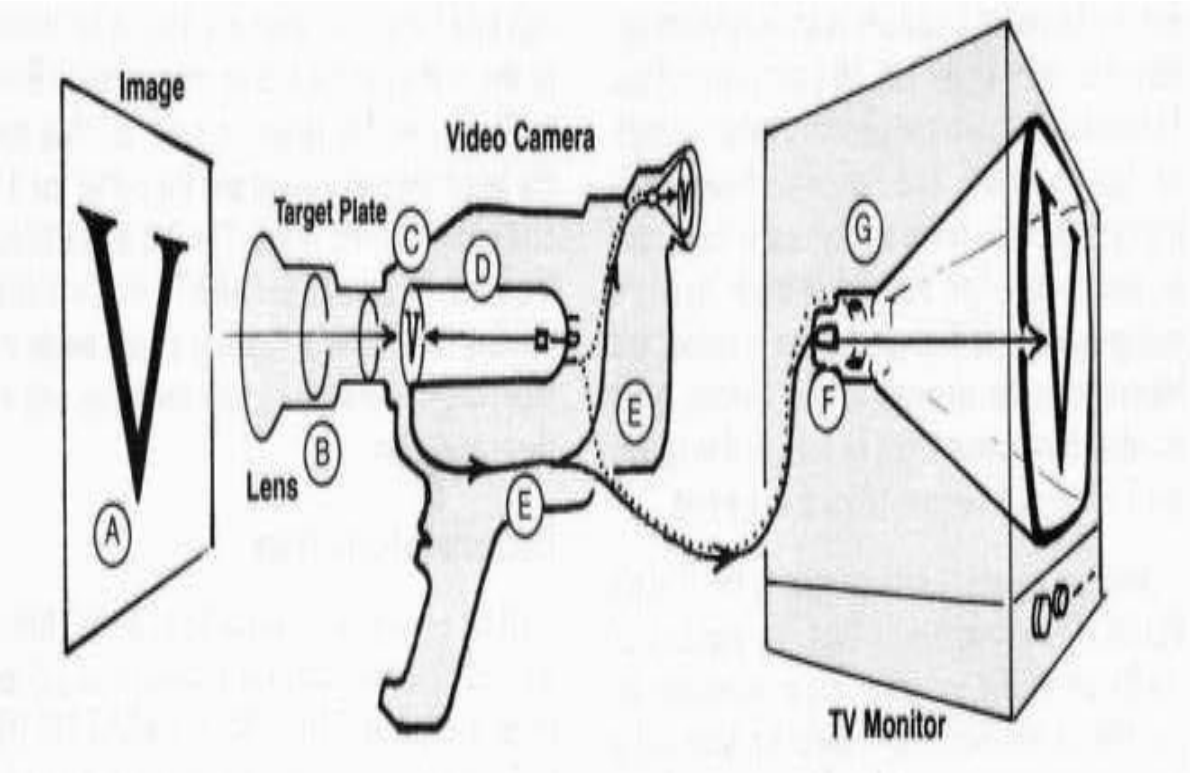


Image
A
Video Camera
Target Plate
C
D
B
Lens
E
E
F
G
TV Monitor

VIDEO CAMERA

ASSIGNMENT 1

Explain the functioning of a Hd video a camera, with the help of diagram.

VIDEO CAMERA

ASSIGNMENT 1

SHOT COMPOSITION

RULES OF COMPOSITION

1. Simpli city
Don't place your primary subject against a busy or congested background. Each scene should have a single story to tell. To simplify your shot, you may need to alter the camera position, alter the size of the image, or select the right background.

2. Rule of Thirds
- Mentally divide your viewfinder into thirds horizontally and vertically.
- Place your primary point of interest on the intersection of two lines.
- Lines of interest should occur at 1/3 or 2/3 of the way up (or across) the frame, rather than at the center.

In shots of people, the main line of interest is the imaginary line going through the subject's eyes. So try to place the eyes about 1/3 from the top of the screen.

3. Framing
Look for natural "frames" within your scene.Also, beware of horizontal and vertical lines in the frame (edges of buildings, counter tops, picture frames, and so forth). Make sure the horizontal lines are level and the vertical lines are straight up and down.

4. Leading Lines
Direct the viewers' eyes with leading lines. Use leading lines to direct them to focus on the main subject of your shot.
The direction of the dominant lines in a picture has psychological connotations.
- Horizontal - serenity and inactivity.
- Vertical - strength and dignity.
- Diagonal - action, imbalance, insecurity.
- Curved - softness or movement.

5. Balance
There are two main forms of balance:
Symmetrical balance creates a formal appearance.

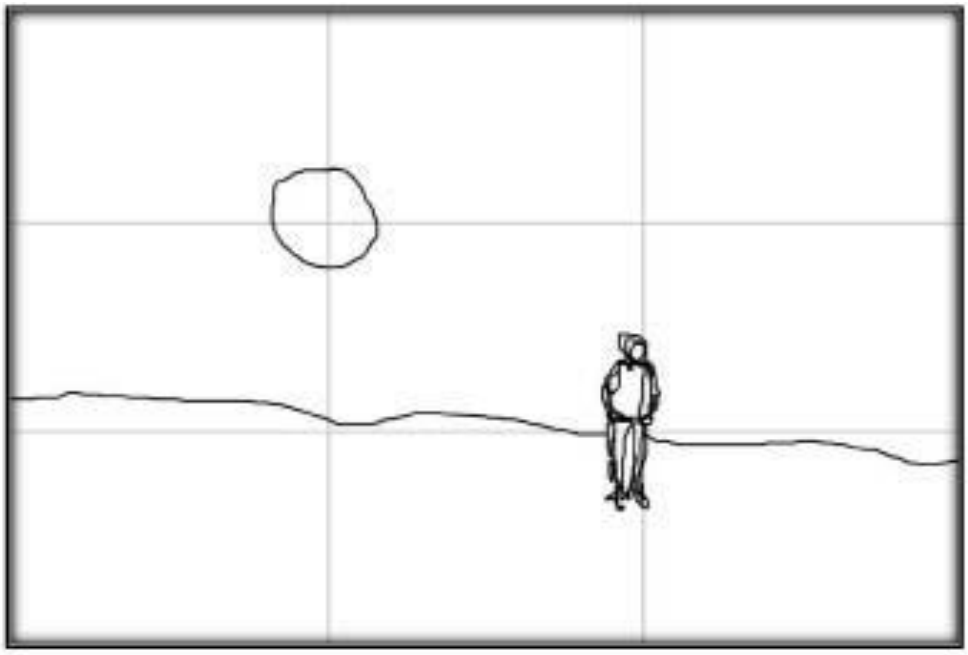
Asymmetrical balance creates a feeling of movement and suggests a creative and dynamic mood.

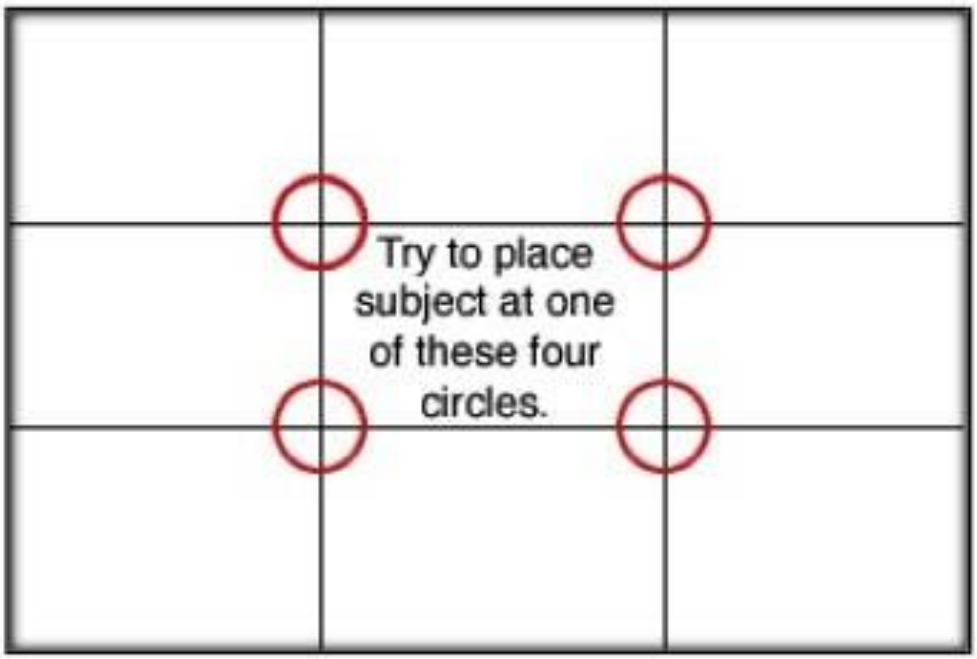
Use the form of balance that is most appropriate for your subject. E.g, a shot of the Parliament may call for symmetrical balance, whereas, a shot of the Kumbh Mela would be more interesting with asymmetrical balance.

SHOT COMPOSITION

RULES OF COMPOSITION

RULE OF THIRDS





SHOT COMPOSITION

TYPES OF SHOTS

Extreme Long Shot
In an extreme wide shot the view is so far from the subject that he isn't even visible. Often used as an establishing shot. Extreme wide shot establishes the whole area and helps us to understand the location better. It shows us the subject's surroundings.

Long Shot
The subject is visible (barely), but the emphasis is still on placing him in hisenvironment. In this the shot is 1/3 of the frames height. The subject is seen but not recognized by the viewers. In this shot the emphasis is on the subject with the environment as the majority of the frame is concerned with the environment.

Mid Long Shot
The subject takes up the full frame, or at least as much as comfortably possible.

The Mid Shot
The mid shot shows some part of the subject in more detail, whilst still showing enough for the audience to feel as if they were looking at the whole subject. In fact, this is an approximation of how you would see a person "in the flesh" if you were having a casual conversation. You wouldn't be paying any attention to their lower body, so that part of the picture is unnecessary.

The Medium Close-up Shot
The medium close-up is half way between a mid shot and a close up. This shot shows the face more clearly, without getting uncomfortably close

The Close-up shot
In the close-up shot, a certain feature or part of the subject takes up most of the frame. A close up of a person usually means a close up of their face (unless specified otherwise). Close-ups are obviously useful for showing detail and can also be used as a cut-in. A close-up of a person emphasizes their emotional state.

SHOT COMPOSITION

TYPES OF SHOTS

Extreme Close up Shot
The ECU (also known as XCU) gets right in and shows extreme detail. You would normally need a specific reason to get this close. It is too close to show general reactions or emotion except in very dramatic scenes.

SOME OTHERS

Cut-In
Shows some (other) part of the subject in detail.

CA (Cutaway)
A shot of something other than the subject.

Two-Shot
A shot of two people, framed similarly to a mid shot.

(OTS) Over-the-Shoulder Shot
Looking from behind a person at the subject.

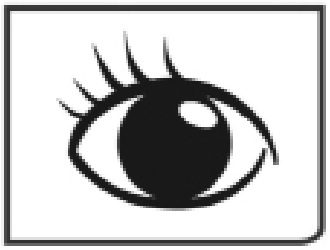
Noddy Shot
Usually refers to a shot of the interviewer listening and reacting to the subject.

Point-of-View Shot (POV)
Shows a view from the subject's perspective.

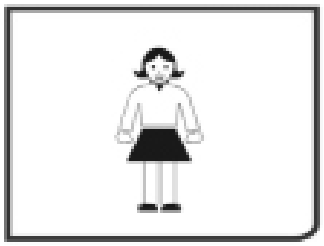
Weather Shot
The subject is the weather. Can be used for other purposes, e.g. background for graphics.

SHOT COMPOSITION

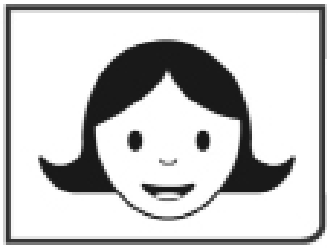
TYPES OF SHOTS



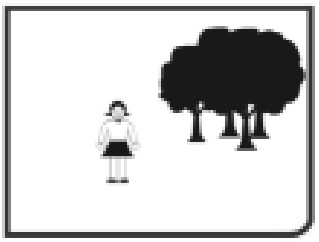
`EXTREME CLOSE UP (ECU)



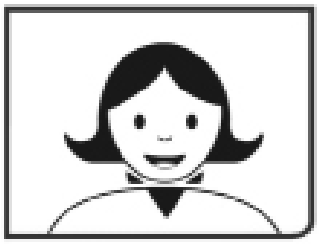
LONG SHOT (LS)



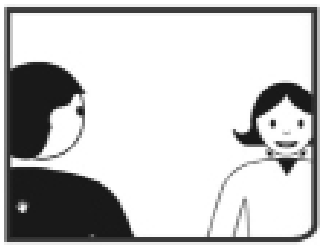
CLOSE UP (CU)



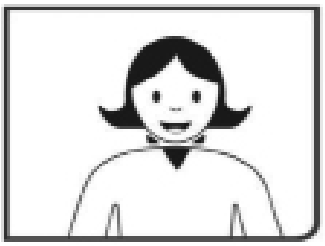
EXTREME LONG SHOT (ELS)



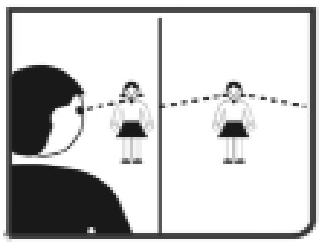
MEDIUM CLOSE UP (MCU)



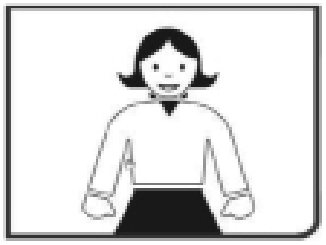
OVER THE SHOULDER (OTS)



MID SHOT (MS)



POINT OF VIEW (POV)



MID LONG SHOT (MLS)

SHOT COMPOSITION

CAMERA ANGLES

The relationship between the camera and the object being photographed (ie the ANGLE) gives emotional information to an audience, and guides their judgment about the character or object in shot.

The Bird's-Eye view
This shows a scene from directly overhead, a very unnatural and strange angle. Familiar objects viewed from this angle might seem totally unrecognisable at first. This shot putS the audience in a godlike position, looking down on the action. People can be made to look insignificant, ant-like, part of a wider scheme of things.

High Angle
Not so extreme as a bird's eye view. The camera is elevated above the action using a crane to give a general overview. High angles make the object photographed seem smaller, and less significant (or scary). The object or character often gets swallowed up by their setting - they become part of a wider picture.

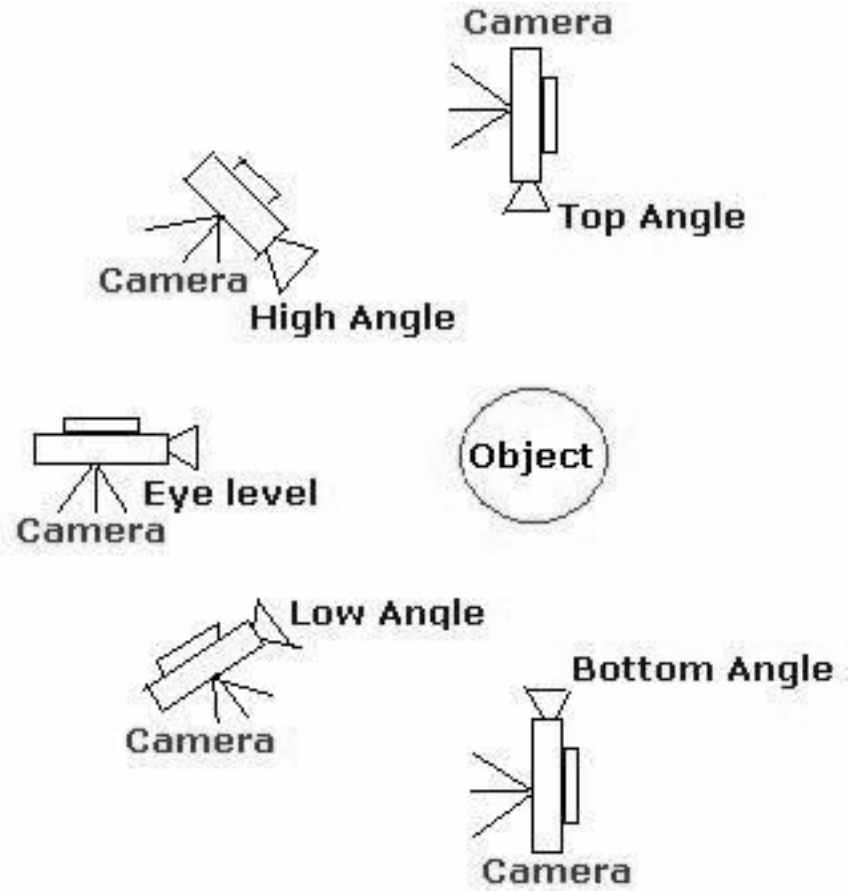
Eye Level
A fairly neutral shot; the camera is positioned as though it is a human actually observing a scene, so that e.g. actors' heads are on a level with the focus.

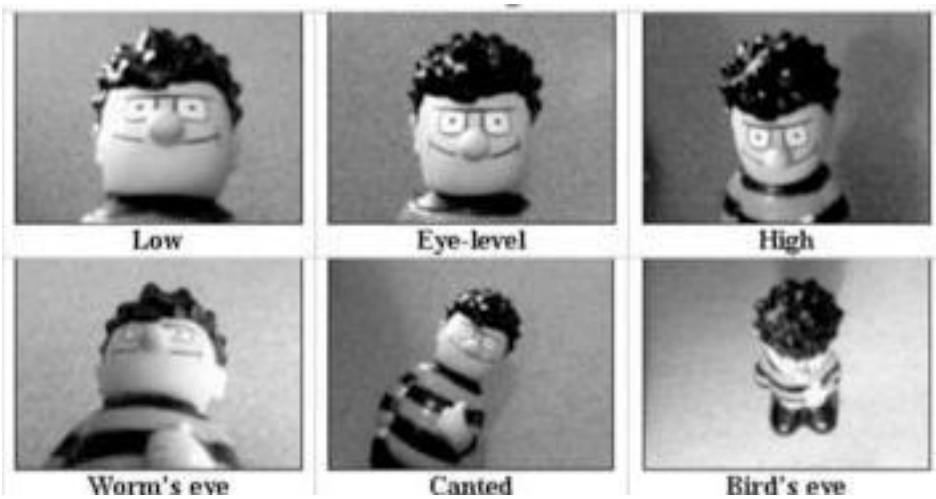
Low Angle
These increase height (useful for short actors) and give a sense of speeded motion. Low angles help give a sense of confusion to a viewer, of powerlessness within the action of a scene. The background of a low angle shot will tend to be just sky or ceiling, the lack of detail about the setting adding to the disorientation of the viewer. The added height of the object may make it inspire fear and insecurity in the viewer, who is psychologically dominated by the figure on the screen.

Oblique/Canted Angle
Sometimes the camera is tilted (ie is not placed horizontal to floor level), to suggest imbalance, transition and instability (very popular in horror movies). This technique is used to suggest point-of-view shots.

SHOT COMPOSITION

CAMERA ANGLES





SHOT COMPOSITION

ASSIGNMENT 2

Shoot 2 frames each for the following types of shots. Paste a still image of each in the space provided.

1. Extreme Long Shot

2. Long Shot

3. Mid Long Shot

4. Mid Shot

5. Medium Close-up

6. Close-up

7. Extreme Close up

8. Cut-In

9. Two-Shot

10. OTS

11. Point-of-View Shot

12. High Angle Shot

13. Eye Level Shot

14. Low Angle Shot

15. Oblique/Canted Angle

SHOT COMPOSITION

ASSIGNMENT 2

Extreme Long Shot 1

Extreme Long Shot 2

SHOT COMPOSITION

ASSIGNMENT 2

Long Shot 1

Long Shot 2

SHOT COMPOSITION

ASSIGNMENT 2

Mid Long Shot 1

Mid Long Shot 2

SHOT COMPOSITION

ASSIGNMENT 2

Mid Shot 1

Mid Shot 2

SHOT COMPOSITION

ASSIGNMENT 2

Medium Close up 1

Medium Close up 2

SHOT COMPOSITION

ASSIGNMENT 2

Close up 1

Close up 2

SHOT COMPOSITION

ASSIGNMENT 2

Extreme Close-up 1

Extreme Close-up 2

SHOT COMPOSITION

ASSIGNMENT 2

Cut-in 1

Cut-in 2

SHOT COMPOSITION

ASSIGNMENT 2

Two shot 1

Two shot 2

SHOT COMPOSITION

ASSIGNMENT 2

OTS 1

OTS 2

SHOT COMPOSITION

ASSIGNMENT 2

Point-of-Vi ew Shot 1

Point-of-Vi ew Shot 2

SHOT COMPOSITION

ASSIGNMENT 2

High Angle 1

High Angle 2

SHOT COMPOSITION

ASSIGNMENT 2

Eye Level 1

Eye Level 2

SHOT COMPOSITION

ASSIGNMENT 2

Low Angle 1

Low Angle 2

SHOT COMPOSITION

ASSIGNMENT 2

Oblique An gle 1

Oblique An gle 2

CAMERA MOVEMENT

TYPES OF CAMERA MOVEMENT

A director m ay choose to move action along by telling the story as a series of cuts, going from one shot to another, or they may decide to move the camera with the action. Moving the camera often takes a great deal of time, and makes the action seem slower, as it takes several second for a moving camera shot to be effective, when the same information may be placed on screen in a series of fast cuts. Not only must the style of movement be chosen, but the method of actually moving the camera must be selected too. There are seven basic methods:

1. Pans
A movement which scans a scene horizontally. The camera is placed on a tripod, which operates as a stationary axis point as the camera is turned, often to follow a moving object which is kept in the middle of the frame.

2. Tilts
A movement which scans a scene vertically, otherwise similar to a pan.

3. Dolly Shots
Sometimes called TRUCKING or TRACKING shots. The camera is placed on a moving vehicle and moves alongside the action, generally following a moving figure or object. Complicated dolly shots will involve a track being laid on set for the camera to follow, hence the name. The camera might be mounted on a car, a plane, or even a shopping trolley. A dolly shot may be a good way of portraying movement, the journey of a character for instance, or for moving from a long shot to a close-up, gradually focusing the audience on a particular object or character.

4. Crane Shots
Basically, dolly-shots-in-the-air. A crane (or jib), is a large, heavy piece of equipment, but is a useful way of moving a camera - it can move up, down, left, right, swooping in on action or moving diagonally out of it. The camera operator and camera are counterbalanced by a heavy weight, and trust their safety to a skilled crane/jib operator.

CAMERA MOVEMENT

TYPES OF CAMERA MOVEMENT

5. Hand-he ld shots

The hand-held movie camera first saw widespread use during World War II, when news reporters took their cameras into the heat of battle, producing some of the most arresting footage of the twentieth century. After the war, it took a while for commercially produced movies to catch up, and documentary makers led the way, demanding the production of smaller, lighter cameras that could be moved in and out of a scene with speed, producing a "fly-on-the-wall" effect.This aesthetic took a while to catch on with mainstream cinema, as it gives a jerky, ragged effect, totally at odds with the organised smoothness of a dolly shot. The Steadicam (a heavy contraption which is attached a camera to an operator by a harness. The camera is stabilized so it moves independently) was debuted in Marathon Man (1976), bringing a new smoothness to hand held camera movement and has been used to great effect in movies and TV shows ever since. No "walk and talk" sequence would be complete without one. Hand held cameras denote a certain kind of gritty realism, and they can make the audience feel as though they are part of a scene, rather than viewing it from a detached, frozen position.

6. Zoom Lenses

A zoom lens contains a mechanism that changes the magnification of an image. A video zoom lens can change the position of the audience, either very quickly (a smash zoom) or slowly, without moving the camera an inch, thus saving a lot of time and trouble. The drawbacks to zoom use include the fact that while a dolly shot involves a steady movement similar to the focusing change in the human eye, the zoom lens tends to be jerky (unless used very slowly) and to distort an image, making objects appear closer together than they really are. Zoom lenses are also drastically over-used by many directors, who try to give the impression of movement and excitement in a scene where it does not exist.

7. The Aerial Shot

An exciting variation of a crane shot, usually taken from a helicopter. This is often used at the beginning of a film, in order to establish setting and movement. A helicopter is like a particularly flexible sort of crane - it can go anywhere, keep up with anything, move in and out of a scene, and convey real drama and exhilaration — so long as you don't need to get too close to your actors or use location sound with the shots.

CAMERA MOVEMENT

ASSIGNMENT 3

Shoot 3 fra mes each for the following types of shots and make a DVD at the end of semester.

1. Pan

2. Tilt

3. Hand held Shots

4. Zoom Shots

LIGHTING

LIGHTING BASICS

Light is the "raw material" for creating visual images. Everything related to vision is related to light. Whether the medium is still photography, motion film, video or computer-generated images, light forms the basis of everything you see.

It is important to think of lighting not as something extra which is added in some situations, but as a fundamental part of all visual media production. All video uses some sort of lighting, whether it be natural light (from the sun) or artificial lights. The goal of video lighting is to choose the best source(s) to achieve your goals.

First and foremost you need enough light. You must ensure that your camera is able to record an acceptable picture in the conditions. With modern cameras this is seldom a problem except in very low light or strong contrast.

Assuming you have enough light, you must then consider the quality of the light and how the various light sources combine to produce the image.

If you have clashing light sources (e.g. artificial interior lights with sunlight coming through the windows), you may find the colours in your image appear unnatural. It's best to control the light sources yourself if possible (e.g. turn off the lights or close the curtains).

When moving between locations, think about what light source you are using. If you move from an outside setting to an inside one with artificial lights, the amount of light may seem the same but the colour temperature will change according to the type of lights. In this case you need to white balance your camera for the new light source.

LIGHTING

WHITE BALANCE

White balan ce basically means colour balance. It is a function which gives the camera a reference to “true white” — it tells the camera what the colour white looks like, so the camera will record it correctly. Since white light is the sum of all other colours, the camera will then display all colours correctly.

Incorrect white balance shows up as pictures with orange or blue tints.

How to Perform a Manual White Balance
You should perform this procedure at the beginning of every shoot, and every time the lighting conditions change. It is especially important to re-white balance when moving between indoors and outdoors, and between rooms lit by different kinds of lights. During early morning and late evening, the daylight colour changes quickly and significantly (although your eyes don’t notice, your camera will). Do regular white balances during these periods.

1. Point your camera to a pure white subject, so that most of what you’re seeing in the viewfinder is white.

2. The subject should be fairly matte, that is, non-reflective.

3. Set your exposure and focus.

4. Activate the white balance by pressing the white balance button. The camera may take a few seconds to complete the operation, after which you should get a message (or icon) in the viewfinder.

LIGHTING

THREE POINT LIGHTING

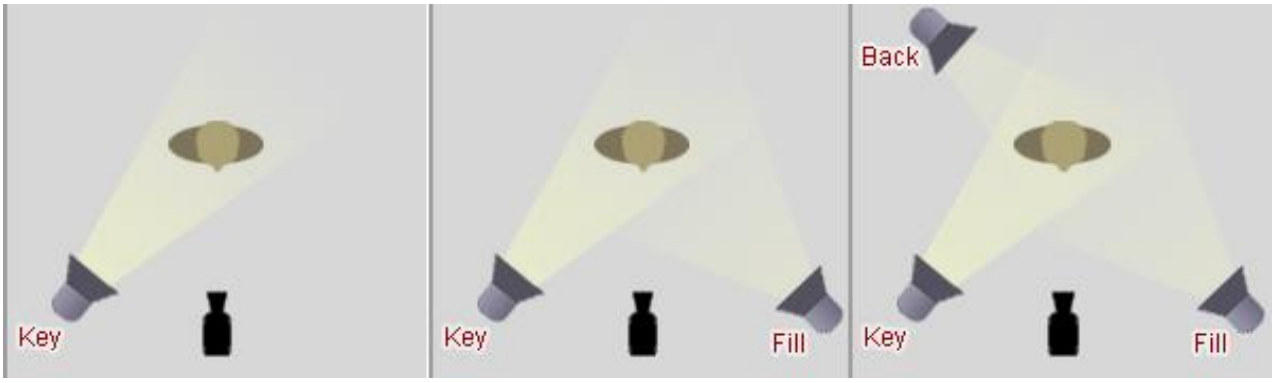
The Three P oint Lighting Technique is a standard method used in visual. It is a simple but versatile system which forms the basis of most lighting.

The technique uses three lights called the key light, fill light and back light.

Key Light
This is the main light. It is usually the strongest and has the most influence on the look of the scene. It is placed to one side of the camera/subject so that this side is well lit and the other side has some shadow.

Fill Light
This is the secondary light and is placed on the opposite side of the key light. It is used to fill the shadows created by the key. The fill will usually be softer and less bright than the key. To acheive this, you could move the light further away or use some spun. You might also want to set the fill light to more of a flood than the key.

Back Light
The back light is placed behind the subject and lights it from the rear. Rather than providing direct lighting (like the key and fill), its purpose is to provide definition and subtle highlights around the subject's outlines. This helps separate the subject from the background and provide a three-dimensional look.



LIGHTING

TYPES OF STUDIO LIGHTS

HALOGEN – The halogen or quartz lamp is the most prevalent light source used in video production. This type of bulb burns hot and bright and comes in high wattages. This lamp provides an intense, steady, white light that is rated at 3200K (for indoor shooting). The halogen lamp also has a long burn life, which makes it economical. The disadvantages of the halogen lamp are its intense heat and high power consumption. When using a light with a halogen lamp, you have to build in time for the light to cool down before you put it away. Whatever you do, do not touch the light while it is on. It will be very hot.

BABY – Baby Solar is a small light of 1 KW. It is sometimes simply referred to as baby. It has a halogen bulb and emits orange light. It is called a Fresnel in the west.

MULTI 10 & MULTI 20 – These are also small lights fixed on stands. A multi 10 is 1000 watt light whereas Multi 20 is a 2000 watt light. These are called junior and senior in Chennai.

LIGHTING

OTHER LIGHTING EQUIPMENT

Light Meter - A tool used to measure light and indicate the ideal exposure setting. Also known as an exposure meter.

Reflector Board - A specially-designed reflective surface used to act as a secondary light source. The board is lightweight and flexible, and is normally folded up for transport in a small carry-case.

Gels - Materials which are placed in front of a light source to alter it's characteristics, e.g. colour temperature

Stands & Clamps - Systems used to support lights and hold them in the correct position.

Camera Filters – These are transparent or translucent optical elements which are either attached to the front of the lens or included as part of the lens housing. Filters alter the properties of light before it reaches the CCD. Filters can be used to correct problems with light or to create certain effects.

LIGHTING

ASSIGNMENT 4A

Draw a colo ured and labeled diagram showing four point lighting.

LIGHTING

LIGHTING

ASSIGNMENT 4B

Explain the uses of the following camera/ light filters:

1. Neutral Density (ND)

2. Ultra Violet (UV)

3. Polarizing

4. Diffusion

LIGHTING

ASSIGNMENT 4C

5. Sepia

6. Fog

7. Colour Conversion / Correction

8. Star Effect

LIGHTING

ASSIGNMENT 4D

Using studi o lights and other lighting equipment, light up an indoor and outdoor set each. Paste photographs of each in the space provided.

PASTE INDOOR PHOTO 1 (5”x7”)

LIGHTING

ASSIGNMENT 4D

PASTE INDOOR PHOTO 2 (5”x7”)

LIGHTING

ASSIGNMENT 4D

PASTE OUTDOOR PHOTO 1 (5”x7”)

LIGHTING

ASSIGNMENT 4D

PASTE OUTDOOR PHOTO 2 (5”x7”)

SOUND

SOUND - BASICS

It is absolut ely vital that one get the sound right for their video - without good sound, the work will look amateurish and sloppy. A slick soundtrack can often hide the cracks in images. Therefore one needs to plan the sound just as carefully as the images. Sound can help you keep your audience's attention.

There are several different sorts of sound that can be used. Some sounds will be recorded using the camera, and other sounds will come from other sources.

SOUND

TYPES OF SOUND

Sound can be divided into two essential areas:

Diegetic - Generated by things we can see in the picture

Non-Diegetic - Generated outside the picture e.g. voice over or music

Diegetic Sound
Diegetic sound begins –but doesn't end– with what you record on location at the same time as you capture images. Location sound is often enhanced with sound effects (used to add or heighten individual sounds for narrative effect e.g. a phone ringing, or an explosion off camera).Ambient Sound(outdoors) or Room Tone(indoors) is layered in for realism. Dialogue is an important part of diegetic sound, and depends on vocal delivery. Dialogue can be enhanced in post production. Sound motifs (e.g. birdsong) can be added as part of post-production sound design, but may seem to come from within the frame.

Non-Diegetic Sound
Raw footage is usually enhanced through the addition of non-diegetic sound, usually in the form of music or voice over.Adding music to images is an art form. Music creates mood and atmosphere, often by manipulating the emotions experienced while viewing.

SOUND

RECORDED SOUND

Room Tone and Ambient Sound

With a video camera, there is no such thing as silence. If one is filming indoors the camera will pick up what is known as ‘room noise’ - the hum created by electrical appliances, the buzz of fluorescent lights, etc. Professional sound recordistsalways record two minutes or so of room tone (with no one talking or moving) as it can come in very useful for patching up a soundtrack. Room noise is deadened by soft furnishing.

Outside there is also a lot of background noise, or ambient sound - passing traffic, birdsong, wind, nearby or distant people, aircraft, reversing trucks, squawking sirens - a whole cacophony of sounds that cannot be controlled. This is the noise of everyday life, and without it images begin to look very odd indeed. This needs to be recorded to add meaning to filmed sequences, but care must be taken that it is not too loud and that it does not drown out any vital dialogue or voice over.

Dialogue, or Spoken to Camera sound
There is a microphone on the front of the camera. Most video cameras come with an microphone which basically records all the sounds that are present in front of the camera. This means that the dialogue that is being capturedmust be louder than any background noise.

Voice Over
The most efficient way to record a voice over is to find somewhere absolutely quiet and speak directly into the camera microphone. You can record your own voice overs, or get

SOUND

SOUND FROM OTHER SOURCES

Sound Effec ts (SFX)
Sometimes one has to heighten realism by adding in sound effects at a crucial moment. You can download free sound effects or buy some Sound FX.

Music
Music can totally change the mood of an audio visual piece. Music can make an audience scared, tearful, happy, aware of the seriousness of the situation, or just want to dance. Choose your music carefully. Think about the mood of that music, its pace and whether it is appropriate forthe images. If the music has lyrics it should match the meaning of the images.Music can be classified as either soundtrack or score.

Soundtrack - Previously-recorded music chosen because of its fit to the rhythm, content and mood of a sequence. If a song, the lyrics may add meaning to the images.

Score - Music specifically composed to accompany images. As well as enhancing mood and atmosphere, it can be used thematically - e.g. a character can be represented by a musical theme every time they appear, or the audience can be reminded of a situation every time a musical theme recurs. Music canbe discordantor melodic, depending on the desired emotional effect in the viewer.

SOUND

MICROPHONES

A micropho ne is an example of a transducer, a device that changes information from one form to another. Sound information exists as patterns of air pressure; the microphone changes this information into patterns of electric current. A variety of mechanical techniques can be used in building microphones. The most commonly encountered microphones (according to Transducer Types) are:

– Dynamic

– Condenser

– Ribbon

The polar pattern of a microphone is the sensitivity to sound relative to the direction or angle from which the sound arrives, or easier worded how well the microphone “hears” sound from different directions.A variety of microphones are available according to their pick up pattern. They are:

– Unidirectional

– Bidirectional

– Omnidirectional

– Cardioid

– Super Cardioid

– Hyper Cardioid

– Shotgun

SOUND

ASSIGNMENT 5

Explain the following types of microphones in detail using diagrams:

1. Dynamic

2. Condenser

3. Ribbon

4. Unidirectional

5. Bidirectional

6. Omnidirectional

7. Cardioid

8. Super Cardioid

9. Hyper Cardioid

10. Shotgun

SOUND

ASSIGNMENT 5

Dynamic

SOUND

ASSIGNMENT 5

Condenser

SOUND

ASSIGNMENT 5

Ribbon

SOUND

ASSIGNMENT 5

Unidirectional

SOUND

ASSIGNMENT 5

Bidirectional

SOUND

ASSIGNMENT 5

Omnidirectional

SOUND

ASSIGNMENT 5

Cardioid

SOUND

ASSIGNMENT 5

Super Cardioid

SOUND

ASSIGNMENT 5

Hyper Cardioid

SOUND

ASSIGNMENT 5

Shotgun

MISCELLANEOUS

ASSIGNMENT 6

Make a PSA(1 minute).

Or

Make a short film (Fiction, 3-5 min) on any topic of your choice.

REFERENCES

BOOKS

Television Production Handbook; Herbert Zettl

Introduction to Media Production; Gorham Kindem & Robert B. Musburger

WEBSITES

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